



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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May 21, 1993

Mr. Thomas A Henry, Jr.
South Standard Mining Company
1111 Walker Building
Salt Lake City, Utah 84111

Dear Mr. Henry:

Re: Review for a Large Mining Notice, South Standard Mining Company, Trixie Mine, M/049/024, Utah County, Utah

The Division has completed its initial review of South Standard Mining Company's permit amendment received February 19, 1993. This updated application for the Trixie Mine was prepared as an amendment to the existing permit. The Trixie shaft was originally approved in February 1984 as an amendment to the approved Burgin/Apex Mine NOI. We asked Mr. Allan Young, who prepared the amended application, to prepare this plan as a stand alone document, *reformatted* according to our new rules. Our reasons are as follows:

1. The Division does not consider this permitting action as an *amendment* to Sunshine Mining Company's approved permit. The separation of the approved permit into two distinct permits under two different operators is not considered an insignificant change. We consider the overall reduction in reclamation surety, the decrease in total disturbed acreage, and the separation of partially overlapping, operational and reclamation responsibilities between two parties, to be a significant change/departure from Sunshine Mining Company's approved permit.
2. Future changes/modifications to the mining and reclamation plan will be easier to prepare (and review), as inserts to appropriate sections of the approved NOI.
3. Previous permitting experience has demonstrated that the process of delineating separate and distinct operational and reclamation responsibilities between two operators, under one approved permit, is extremely cumbersome and difficult to interpret/understand, and nearly impossible to regulate and enforce.



4. Because South Standard is not assuming *all* of the duties of the former operator (Sunshine) under the approved notice of intention, the Division cannot approve a permit transfer under the transfer provisions of the Mined Land Reclamation Act or its promulgated rules.

It is apparent that your application was prepared as a stand alone document. However, it was not formatted in accordance with the new rules. Because the old rules are no longer in effect, we have processed the application according to our December 1988 revised rules. In recognition of Sunshine's approved plan, we have tried not to ask for supplemental baseline information that may have already been approved as part of the older NOI/permit. Most of our comments are intended to clarify our understanding and interpretation of what was approved under the original mining and reclamation plan. The comments are listed below under the applicable Minerals Rule heading. Please format your response in a similar fashion.

R647-4-101 Filing Requirements and Review Procedures

R647-4-105 Maps, Drawings & Photographs

105.2 Surface facilities map

Figure 3 does not clearly show the drainage channel and 18-inch culvert that extends into the rock dump as referenced on page 8 of the revised application. Please revise the figure to show this surface drainage feature. The existing discharge point (presently inactive?) for in-mine "meteoric" groundwater should also be clearly identified on this figure or other appropriate drawing/map. (DWH)

105.3 Drawings or Cross Sections (slopes, roads, pads, etc.)

Figure 3 does not include a boundary clearly identifying the future dump addition. Please provide such a border. (AAG) ✓

R647-4-107 Operation Practices

107.1.11 Closing or guarding shafts & tunnels

The submission does not contain an adequate description of the measures taken to prevent unauthorized entry to the mine property and shafts. Please describe the features in place to prevent unauthorized entry. (AAG) ✓

107.1.12 Disposal of trash, scrap, debris

The submission does not describe the method of handling trash and debris generated during operations. Please describe the handling of these items. (AAG)

107.1.14 Posting warning signs

The submission does not mention the posting of warning signs alerting the public of possible hazards. Warning signs should be posted around the perimeter of the mining area and/or the shaft location(s). Please describe the locations of any warning signs currently in place. (AAG)

107.3 Erosion control & sediment control

The submission did not describe measures taken to control sediment or erosion at the site. Please describe any features/measures which will be used to handle sediment and erosion. (AAG)

107.5 Suitable soils removed & stored

The plan does not indicate that any topsoil has been or will be stockpiled. Will there be any development of undisturbed areas on the site? If so, the operator must provide a soil salvage plan. (HWS)

R647-4-109 Impact Assessment

109.1 Impacts to surface & groundwater systems

On page 7, the text describes the Trixie mine as being essentially dry with no groundwater discharged from the permit area. On page 8, the text indicates that groundwater is being produced within the mine at one location in the southern-most part on the 750 foot level. Flow rates ranging from 50-100 gpm are discussed.

If no surface discharge is presently occurring to the water storage tank, what is happening to this intercepted groundwater? Assuming an average groundwater inflow of 75 gpm, this would yield approximately 3,348,000 gallons/month (or @123 acre-ft/yr). Under this inflow scenario, the mine could hardly be considered "essentially dry". Is the mine flooding on the 750 or lower levels now? How is this mine water inflow being managed presently?

On page 8, the text states that there will be no uncontrolled discharges/overflow from the water storage tank(s) as in the past. Excess (unusable) water will be pumped down the Trixie Shaft discharging at the water table (once underground mining recommences). What happens to the water next? Will it eventually back up the shaft and flood the lower mine sections? A better description of the underground water management plan is requested. This recharging/disposal scenario may need to be cleared/accepted by the Division of Water Quality and/or Division of Water Rights(?). (DWH)

109.2 Impacts to threatened & endangered wildlife/habitat

The submission does not mention whether there are impacts to threatened or endangered species/habitat or not. Was an assessment performed under the original mine plan? Please state whether there will or will not be any such impacts to T & E species/habitat. AAG)

109.4 Slope stability, erosion control, air quality, safety

The submission does not describe impacts (if any) of the mining operation on slope stability, erosion control, air quality, or public health & safety. Please describe any such impacts and/or provide a specific reference to these pertinent sections in the original 1982 NOI or 1984 amendment. AAG)

109.5 Actions to mitigate any impacts

Please describe the actions taken to mitigate any impacts described above. AAG)

R647-4-110 Reclamation Plan

110.5 Revegetation planting program

The revegetation plan should include more species to better ensure success. The Division suggests adding the following species to the approved seedmix for the disturbed areas to be reclaimed:

Shrubs

Rubber rabbitbrush

2 lbs/ac

Chrysothamnus nauseosus

Fourwing saltbush 3 lbs/ac
Atriplex canescens

Forbs

Palmer penstemon	2 lbs/ac
<u>Penstemon palmeri</u>	

*** NOTE:** It may be necessary to develop an alternate seedmix for reclamation of the waste dump areas. This issue will require further discussion and consideration as the approved mine plan does not adequately describe the final reclamation decision achieved in this regard. (HWS)

R647-4-111 Reclamation Practices

111.3 Erosion & sediment control

Page 16, Reclamation Plan - Item 4, indicates that the entire area will be scarified and appropriate measures taken to minimize erosion. Please describe the reclamation measures to be taken to minimize erosion and control sediment. (AAG)

111.11 Structures & equipment buried or removed

Page 17, Reclamation Plan - Item 6, indicates that the power poles and transmission lines running between the South Standard property and the Trixie were installed prior to 1975 and are therefore not subject to reclamation requirements. If the power transmission system, substation and telephone line have been used post-1975 to support continued mining operations, then these structure/facilities should be subject to reclamation requirements. The operator will need to modify the reclamation plan to include appropriate plans for reclamation of these support facilities. DWH)

111.12 Topsoil redistribution

No topsoil was salvaged during previous operations. This submission does not include a plan for future topsoil salvage. It may be possible for the operator to salvage topsoil in the area of the dump expansion prior to the expansion. Please include a topsoil salvage plan for this area or state why such a plan is not feasible. (AAG)

111.13 Revegetation

See comments under R647-4-110.5. HWS)

R647-4-112 Variance

Since no reclamation variances have been formally requested (previously or currently), the operator will be expected to meet revegetation standards across the site. Because the soils in the area consist mostly of mine wastes, tailings, pit wastes and the remnants from ore stockpiles (PK soils), meeting the 70% standard may prove difficult. The operator will need to provide the Division with a plan for reclaiming these areas, which will involve a proposal for soil amendments and seedmix. Waste dump areas will probably require a reclamation standard less than 70%, or simply a commitment from the operator to apply an appropriate soil amendment and seedmix. (HWS)

R647-4-113 Surety

A draft reclamation surety estimate is enclosed for your review and comment. Further refinement will likely be required as we work out the outstanding reclamation details/concerns as outlined in this document. (AAG)

R647-4-116 Public Notice & Appeals

Because this permitting action will involve the filing and processing of a new large mining permit application, the standard public notice process will need to be followed. When we issue a tentative approval of your large mining application, we must also publish our tentative approval decision in a local newspaper and the Salt Lake Tribune. The public notice begins a 30-day public comment period. Provided no substantive public comments are received during that timeframe, and the Board of Oil, Gas and Mining accepts the amount and form of reclamation surety, final approval will then be granted by this Division.

R647-4-120 Transfer of Notice of Intention

South Standard has included a Transfer of Notice of Intention - Large Mining Operations (FORM MR-TRL), as part of their permit amendment application. Section 40-8-19 of the Mined Land Reclamation Act and Rule R647-4-120, require the successor of a permitted mining operation to assume *full* responsibility for continued mining and reclamation operations as outlined under the approved permit.

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This action would only transfer a portion of Sunshine's outstanding mining and reclamation responsibilities to South Standard. A *partial* permit transfer is not acceptable for approval by this Division.

After considerable discussion and deliberation with our legal counsel, it is the Division's position that this proposal should be categorized as a new permitting action. Consequently, the filing of a new Large Mining Operation permit application will be required. The application must be formatted according to the new rules and will be processed accordingly. South Standard may prepare new text to satisfy the requirements of the new rules, or utilize and reference by appendices, previously approved permitting information as contained in Sunshine's original permit. We do not intend to require additional baseline information that may not have been required under the old rules or Sunshine's previously approved permit. A copy of a Large Mining Operation Notice of Intention application form is enclosed for your use.

We apologize for the unforeseen delay in completing our review. We appreciate your patience and cooperation in completing this permitting action. Please contact me, or Tony Gallegos if we can answer any questions you may have in preparing your response to this completeness review.

Sincerely,



D. Wayne Hedberg
Permit Supervisor
Minerals Regulatory Program

jb

Enclosures

cc: Allan Young, Operations Manager
Sunshine Mining Company
815 Park Boulevard, Suite 100
Boise, ID 83712
Lowell Braxton, DOGM
Minerals staff (route)

M049024.rvw

RECLAMATION ESTIMATE

South Standard Mining Company

DRAFT

Trixie Shaft Area

last revision

03/22/93

M/049/024

Utah County

file TRIXIEST.WQ1

Prepared by Utah State Division of Oil, Gas & Mining

Reclamation Details

- Existing permit listed \$37,320 (1984-\$) for the Trixie area
- Existing permit listed 11.4 acres disturbed, 4.75 acres to be reclaimed
- This proposal lists 8.55 acres disturbed and reclaimed
- All buildings/equipment/trash & debris to be removed from the site
- Shaft & borehole capped with 8" thick pre-cast concrete & buried
- Remaining waste dump regraded to 2:1 & natural drainage restored
- Access roads & pads will be recontoured & ripped
- Power poles & lines are PRE-LAW & will be de-energized only(?)
- Buried water lines (3 ft deep) will not be removed
- Disturbed area revegetated by hydroseeding with mulch, fertilizer, tackifier

-Estimated total disturbed acreage =

8.55 acres

Activity	Amount	\$/unit	\$
Demolish & remove all structures	1 sum	5,000	5,000
Break up & bury concrete	1 sum	800	800
Remove trash & debris	8.55 acre	50	428
Shaft & borehole capping mtl.	1 sum	2,700	2,700
Labor/equipment for capping	1 sum	320	320
Regrade waste dump to 2:1	4 acre	326	1,304
Drainage & rip rap installation	1 sum	500	500
Regrade & rip roads/pads	1 acre	516	516
Hydroseed, mulch, fertilize, tackifier	8.55 acre	1,100	9,405
Mobilization	3 equip	1,000	3,000
	Subtotal		23,973
	Add 10% contingency		2,397
	1993-\$ Subtotal		26,370
	Add 5 yr escalation at 1.42%		1,926
	Total 1998-\$		28,296
Rounded Total in 1998-\$			\$28,300
Average cost per acre =			\$3,310